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Sheet 1 of 3

COMPLETE IF KNOWN

Application Number	10/028,437
Filing Date	12-28-2001
First Named Inventor	James A. Cox et al.
Art Unit	2874
Examiner Name	t.b.d.
Attorney Docket Number	V637 02531 US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pp, Columns, Lines where relevant passages or relevant figures appear
		Number	Kind Code ² (if known)			
HJ		5,262,360	A	Holonyak, Jr., et al.	11-16-1993	
		5,373,522	A	Holonyak, Jr., et al.	12-13-1994	
		5,493,577	A	Choquette et al.	02-20-1996	
		5,567,980	A	Holonyak, Jr., et al.	10-22-1996	
		5,581,571	A	Holonyak, Jr., et al.	12-03-1996	
		5,696,023	A	Holonyak, Jr., et al.	12-09-1997	
		5,896,408	A	Corzine et al.	04-20-1999	
		5,903,588	A	Gunter et al.	05-11-1999	
		5,903,589	A	Jewell	05-11-1999	
		5,978,408	A	Thomton	11-02-1999	
		6,014,395	A	Jewell	01-11-2000	
		6,208,681	B1	Thomton	03-27-2001	
		6,269,109	B1	Jewell	07-31-2001	
		6,297,068	B1	Thomton	10-02-2001	
HJ		6,372,533	B2	Jayaraman et al.	04-16-2002	

FOREIGN PATENT DOCUMENTS

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Sheet	2	Of	2
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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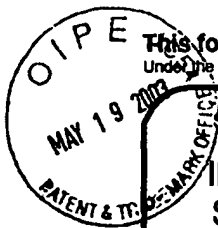
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**INFORMATION DISCLOSURE
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		Number	Kind Code* (if known)			
		US				
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
H ✓		DE	201 13 207	U1	12-20-2001	Ying-Jay Yang		
H ✓		EP	0 772 266	A1	05-07-1997	Motorola, Inc.		

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First Named Inventor	James A. Cox et al.
Art Unit	2874
Examiner Name	t.b.d.
Attorney Docket Number	V637 02531 US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
H		Bowers, J., et al., "Fused vertical cavity lasers with oxide aperture", final report 1996-97 for MICRO project 96-042.	no month
H		Choe, J.S., et al., "Lateral oxidation of AlAs layers at elevated water vapour pressure using a closed-chamber system", letter to the editor, Semicond. Sci. Technol., 15 (2000), pgs. L35-L38.	no month
		Chua, C.L., et al., "Low-threshold 1.57-μm VCSEL's using strain-compensated quantum wells and oxide/metal backmirror", article, IEEE Photonics Technology Letters, Vol. 7, No. 5, pgs. 444-446, May 1995.	
		Chua, C.L., et al., "Planar laterally oxidized vertical-cavity lasers for low-threshold high-density top-surface-emitting arrays", article, IEEE Photonics Technology Letters, Vol. 9, No. 8, pgs. 1060-1062, August 1997.	
		Farrier, R.C. "Parametric control for wafer fabrication: new CIM techniques for data analysis," Solid State Technology, September 1997	
		Fushimi, H., and Wada, K, "Degradation Mechanism in Carbon-doped GaAs Minority-carrier Injection Devices," 1996 IEEE International Reliability Physics Proceedings; (1996), pp. 214-220.	no month
	*	Greib, K.M., et al., "Comparison of fabrication approaches for selectively oxidized VCSEL arrays", article, Vertical-Cavity Surface-Emitting Lasers IV, Proceedings of SPIE, Vol. 3946, pgs. 36-40, 2000.	no month
		Guenther, J., et al., "Commercialization of Honeywell's VCSEL Technology: Further Developments," in Vertical-Cavity Surface-Emitting Lasers V, Choquette, K.D. and Lei, C., editors, Proceedings of the SPIE Vol. 4286, (2001), pp. 1-14.	no month
		Guenther, J., et al., "Reliability of proton-implanted VCSELs for data communications," in Fabrication, Testing, and Reliability of Semiconductor Lasers, Fallahi, M. and Wang, S. editors, Proceedings of the SPIE, vol. 2683, (1996), pp. 102-113.	no month
		Hawthorne, R.A. et al., "Reliability Study of 850 nm VCSELs for Data Communications," 1996 IEEE International Reliability Physics Proceedings, 34, (1996), pp. 203-210.	no month
		Herrick, R.W., et al., "Highly reliable oxide VCSELs manufactured at HP/Agilent Technologies," in Vertical-Cavity Surface-Emitting Lasers IV, Choquette, K.D. and Lei, C., editors, Proceedings of the SPIE Vol. 3946, (2000), pp. 14-19.	
	*	Kash, J.A., et al., "Recombination in GaAs at the AlAs oxide-GaAs interface," Appl. Phys. Lett. 67 (14), 2 October 1995; pp 2022-2024.	no month
		Koley, B., et al., "Dependence of lateral oxidation rate on thickness of AlAs layer of interest as a current aperture in vertical-cavity surface-emitting laser structures", article, Journal of Applied Physics, Vol. 84, No. 1, pgs. 600-605, July 1, 1998.	
		Maeda, K., and Takeuchi, S., "Enhanced Glide of Dislocations in GaAs Single Crystals by Electron Beam Irradiation," Japanese Journal of Applied Physics, vol. 20, no. 3 (1981), pp. L165-L168.	no month
		Osinski, M., et al., "Temperature and thickness dependence of steam oxidation of AlAs in cylindrical mesa structures", article, IEEE Photonics Technology Letters, Vol. 13, No. 7, pgs. 687-689, July 2001.	
		Peck, D. Stewart, "Comprehensive Model for Humidity Testing Correlation," 1986 IEEE International Reliability Physics Proceedings; (1986), pp. 44-50.	no month
		Ries, M.J., et al., "Visible-Spectrum (λ= 650 nm) photopumped (pulsed, 300 K) laser operation of a vertical-cavity AlAs-AlGaAs/InAlP-InGaP quantum well heterostructure utilizing native oxide mirrors", article, Appl. Phys. Lett. 67, pgs. 1107-1109, August 1995	
		Sah, C-T, et al., "Carrier Generation and Recombination in P-N Junctions and P-N Junction Characteristics," Proceedings of the IRE, September 1957, pp 1228-1243.	
H		Shi, S., et al., "Photoluminescence study of hydrogenated aluminum oxide-semiconductor interface," Appl. Phys. Lett. 70 (10), 10 March 1997; pp 1293-1295.	

Examiner
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Date
Considered

5/11/04

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Sheet	3	Of	3
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Filing Date	12-28-2001
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First Named Inventor	James A. Cox et al.
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Art Unit	2874
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Examiner Name	t.b.d.
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Attorney Docket Number | V637 02531 US

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